

ABSTRACT

A feed system for a phase change ink jet printer includes a longitudinal feed channel for guiding solid ink sticks along a path from an insertion point to a melt plate. The surfaces of the feed channel that come into contact with the ink stick are formed of, or coated with, a non-marking material. The non-marking material is a material having a very low surface energy, to which the ink material does not adhere or build up, and/or that readily sheds any ink material that should adhere. Exemplary non-marking materials include tetrafluoroethylene (TFE) fluorocarbon polymers or fluorinated ethylene-propylene (FEP) resins. In a particular embodiment, the surfaces of the feed channel are covered with a film tape of polytetrafluoroethylene (PTFE) or similar material.